



## Natural Gas Analysis Report

GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

	Sample Information
Sample Name	CEDAR CANYON LP TO ENTERPRISE
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	03-09-2023
Meter Number	14809C
Air temperature	56
Flow Rate (MCF/Day)	41659
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	CEDAR CANYON LP TO ENTERPRISE
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	NMSW
FLOC	OP-L0967-BT001
Sample Sub Type	CDP
Sample Name Type	METER
Vendor	AKM MEASUREMENT
Cylinder #	3052
Sampled by	J E
Sample date	3-9-2023
Analyzed date	3-15-2023
Method Name	C9
Injection Date	2023-03-15 16:55:06
Report Date	2023-03-15 17:00:57
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	d616d38e-1ef0-43ac-940b-70858213bc73
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

## Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	20279.7	1.1489	0.00005665	1.1511	0.0	0.01113	0.127	
Methane	1026331.0	75.0975	0.00007317	75.2390	761.7	0.41675	12.804	
CO2	9621.2	0.4538	0.00004717	0.4547	0.0	0.00691	0.078	
Ethane	262551.1	11.9875	0.00004566	12.0101	213.0	0.12469	3.224	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	187774.5	6.1281	0.00003264	6.1397	154.8	0.09348	1.698	
iso-butane	80466.7	0.8972	0.00001115	0.8989	29.3	0.01804	0.295	
n-Butane	196029.9	2.1635	0.00001104	2.1676	70.9	0.04350	0.686	
iso-pentane	55079.7	0.5342	0.00000970	0.5352	21.5	0.01333	0.196	
n-Pentane	65775.1	0.6222	0.00000946	0.6234	25.0	0.01553	0.227	
hexanes	53531.0	0.4052	0.00000757	0.4060	19.4	0.01208	0.168	
heptanes	42936.0	0.2653	0.00000618	0.2658	14.7	0.00920	0.123	
octanes	17502.0	0.0951	0.00000543	0.0953	6.0	0.00376	0.049	
nonanes+	2977.0	0.0132	0.00000442	0.0132	0.9	0.00058	0.007	
Total:		99.8117		100.0000	1317.1	0.76898	19.683	

## Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	99.8117		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	75.0		
Flowing Temperature (Deg. F)	75.0		
Flowing Temperature (Deg. F)	75.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1317.1	1294.2	
Gross Heating Value (BTU / Real cu.ft.)	1322.5	1300.1	
Relative Density (G), Real	0.7718	0.7696	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	99.8117	97.0000	103.0000	Pass	

**UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM****Facility:** Cedar Canyon CPD**Vent Date:** 09/11/2023**Duration of Event:** 1 Hour**MCF Flared:** 62**Start Time:** 11:45 AM**End Time:** 12:45 PM**Cause:** Emergency Flare > Planned > Third Party > Flare Destruction and Removal Efficiency (DRE) Study**Method of Flared Gas Measurement:** Gas Flare Meter

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**1. Reason why this event was beyond Operator's control:**

This was a necessary planned flare study event to support Oxy's statements as part of its official response to the EPA's proposed GHG Subpart W rules, and in which, Oxy has partnered with additional operators, API, Marathon, and Chevron to conduct a flare destruction and removal efficiency (DRE) study. The goal of this study is to measure flare DRE's across the Permian to support a higher default DRE factor when calculating GHG emissions. For this study, Oxy hired Providence Photonics to perform the DRE testing using their Mantis Flare Monitor camera. In order to conduct the study, Oxy needed to safely and efficiently simulate a flaring event for a maximum of 15 minutes, in intermittent stages, at selected facilities within the Permian. OXY made every effort to control and minimize emissions as much as possible.

**2. Steps Taken to limit duration and magnitude of venting or flaring:**

This was a necessary planned flare study event to support Oxy's statements as part of its official response to the EPA's proposed GHG Subpart W rules, and in which, Oxy has partnered with additional operators, API, Marathon, and Chevron to conduct a flare destruction and removal efficiency (DRE) study. The goal of this study is to measure flare DRE's across the Permian to support a higher default DRE factor when calculating GHG emissions. For this study, Oxy hired Providence Photonics to perform the DRE testing using their Mantis Flare Monitor camera. In order to conduct the study, Oxy needed to safely and efficiently simulate a flaring event for a maximum of 15 minutes, in intermittent stages, at selected facilities within the Permian. Oxy personnel were on-site during every DRE test study to assist with regulating the flare and once all flare DRE data was captured and recorded, operational flare settings were adjusted to normal operating standards and flaring stopped.

**3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:**

There are no corrective actions taken to eliminate the cause and reoccurrence of venting or flaring. This was a necessary planned flare study event to support Oxy's statements as part of its official response to the EPA's proposed GHG Subpart W rules, and in which, Oxy has partnered with additional operators, API, Marathon, and Chevron to conduct a flare destruction and removal efficiency (DRE) study. The goal of this study is to measure flare DRE's across the Permian to support a higher default DRE factor when calculating GHG emissions.

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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

DEFINITIONS

Action 279196

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 279196
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul>
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QUESTIONS

Action 279196

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 279196
	Action Type: [C-129] Amend Venting and/or Flaring (C-129A)

**QUESTIONS****Prerequisites**

Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.

Incident Operator	[16696] OXY USA INC
Incident Type	Flare
Incident Status	Closure Approved
Incident Well	Unavailable.
Incident Facility	[fAPP2126642013] CEDAR CANOYN GAS GATHERING

Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section) that are assigned to your current operator can be amended with this C-129A application.

**Determination of Reporting Requirements**

Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.

Was this vent or flare caused by an emergency or malfunction	Yes
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	No
Is this considered a submission for a vent or flare event	Yes, minor venting and/or flaring of natural gas.

An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.

Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this vent or flare result in the release of <b>ANY</b> liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No
Was the vent or flare within an incorporated municipal boundary or within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

**Equipment Involved**

Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Emergency Flare > Planned > Third Party > Flare Destruction and Removal Efficiency (DRE) Study

**Representative Compositional Analysis of Vented or Flared Natural Gas**

Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	75
Nitrogen (N2) percentage, if greater than one percent	1
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	0
Oxygen (O2) percentage, if greater than one percent	0

If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.

Methane (CH4) percentage quality requirement	0
Nitrogen (N2) percentage quality requirement	0
Hydrogen Sulfide (H2S) PPM quality requirement	0
Carbon Dioxide (CO2) percentage quality requirement	0
Oxygen (O2) percentage quality requirement	0



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QUESTIONS, Page 2

Action 279196

**QUESTIONS (continued)**

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**QUESTIONS**

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	09/11/2023
Time vent or flare was discovered or commenced	11:45 AM
Time vent or flare was terminated	12:45 PM
Cumulative hours during this event	1

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other   Other (Specify)   Natural Gas Flared   Released: 62 MCF   Recovered: 0 MCF   Lost: 62 MCF.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Gas Flare Meter
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

Venting or Flaring Resulting from Downstream Activity	
Was this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	No
Downstream OGRID that should have notified this operator	0
Date notified of downstream activity requiring this vent or flare	
Time notified of downstream activity requiring this vent or flare	Not answered.

Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control	False
Please explain reason for why this event was beyond this operator's control	This was a necessary planned flare study event to support Oxy's statements as part of its official response to the EPA's proposed GHG Subpart W rules, and in which, Oxy has partnered with additional operators, API, Marathon, and Chevron to conduct a flare destruction and removal efficiency (DRE) study. The goal of this study is to measure flare DRE's across the Permian to support a higher default DRE factor when calculating GHG emissions. For this study, Oxy hired Providence Photonics to perform the DRE testing using their Mantis Flare Monitor camera. In order to conduct the study, Oxy needed to safely and efficiently simulate a flaring event for a maximum of 15 minutes, in intermittent stages, at selected facilities within the Permian. OXY made every effort to control and minimize emissions as much as possible.
Steps taken to limit the duration and magnitude of vent or flare	This was a necessary planned flare study event to support Oxy's statements as part of its official response to the EPA's proposed GHG Subpart W rules, and in which, Oxy has partnered with additional operators, API, Marathon, and Chevron to conduct a flare destruction and removal efficiency (DRE) study. The goal of this study is to measure flare DRE's across the Permian to support a higher default DRE factor when calculating GHG emissions. For this study, Oxy hired Providence Photonics to perform the DRE testing using their Mantis Flare Monitor camera. In order to conduct the study, Oxy needed to safely and efficiently simulate a flaring event for a maximum of 15 minutes, in intermittent stages, at selected facilities within the Permian. Oxy personnel were on-site during every DRE test study to assist with regulating the flare and once all flare DRE data was captured and recorded,

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ACKNOWLEDGMENTS

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**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
<input checked="" type="checkbox"/>	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
<input checked="" type="checkbox"/>	I hereby certify the statements in this amending report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
<input checked="" type="checkbox"/>	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
<input checked="" type="checkbox"/>	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS  
  
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CONDITIONS

Created By	Condition	Condition Date
shelbyschoepf	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	10/25/2023